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aiwa SERVICE

XP-V730C YL(S)
XP-V731 AC(S)
XP-V731C AC(S)
XP-V736 AC(S)

SERVICE MANUAL

COMPACT DISC PLAYER BASIC CD MECHANISM : KSM-780 ATA

• This Service Manual is the “Revision Publishing” and replaces “Simple Manual” (S/M Code No. 09-023-454-2T3).

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S/M Code No. 09-025-454-2R3

REVISION DATA

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SPECIFICATIONS -1/1

Tracking system	3-beam laser
Laser pickup	Semiconductor laser
D/A conversion	8-times oversampling digital filter + 1-bit DAC
Frequency response	20 – 20,000 Hz
Output	PHONES/LINE OUT jack (stereo mini-jack)
Maximum output	12 mW + 12 mW (16 ohms at 1 kHz) 500 mV (47 kohms at 1 kHz)
Power supply	DC 3 V using two size AA (LR6) alkaline batteries DC 2.4 V using two optional rechargeable batteries (Ni-Cd 1.2 V 700 mAh) XP-V730C: AC house current using the optional AC adaptor Except XP-V730C: AC house current using the supplied AC adaptor
Maximum outside dimensions	132 (W) x 22 (H) x 145.8 (D) mm ($5^1/_4$ x $^7/_8$ x $5^3/_4$ in.) (excluding projecting parts and controls)
Weight	Approx. 200 g (7.1 oz.) excluding batteries
AC adaptor AC-D603	Except XP-V730C: Rated volatge: 120 V, 60 Hz

• Design and specifications are subject to change without notice.

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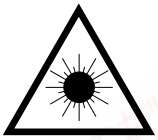
PROTECTION OF EYES FROM LASER BEAM DURING SERVICING -1/1

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
Advarsel: Usynlig laserstråling vedåbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsÊttelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION

L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

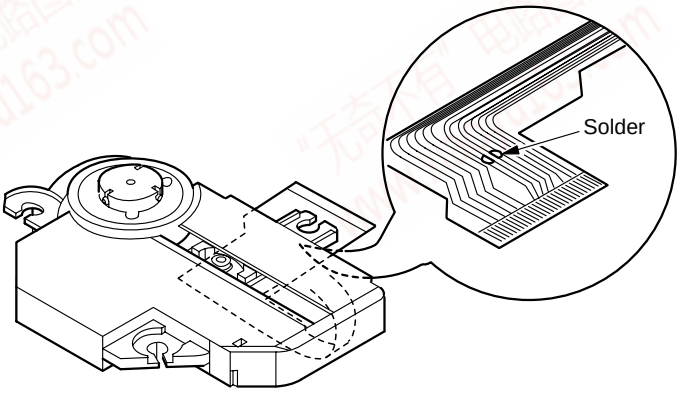
Precaution to replace Optical block

(KSM-780ATA)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

CD PICK-UP Assy PWB



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ACCESSORIES PARTS LIST -1/1

! = ⚠ SAFETY PARTS
C = Components marked
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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
	!	0	001	87-B30-508-010	APA-EI35UL&&250MA/SO 120V:5.5	a	.	c	d
		0	002	87-B30-532-010	HEADPHONE SET #HP-M067	a	.	.	.
		0	003	8C-HC7-721-010	I/B (736) CHC7-91-03 (ENG) S:	a	.	.	.
		0	004	8C-HC7-722-010	I/B (736) CHC7-91-04 (FRA) S:	a	.	.	.
	!	0	005	87-B30-330-010	APD-&&&&&&&&600MA/SO 12V:5VDC	.	b	.	d
		0	006	87-B30-541-010	HEADPHONE SET #HP-M070	.	b	.	.
		0	007	8C-HC7-904-010	I/B(V730C,YL) CHC7-91-11R 150	.	b	.	.
		0	008	87-B30-319-010	HEADPHONE SET #HP-M046(S) NEC	.	.	c	d
		0	009	8C-HC7-731-010	I/B (731/731C) CHC7-91-06 (EN	.	.	c	d
		0	010	8C-HC7-732-010	I/B(731/731C)CHC7-91-16(FRA)S	.	.	c	d

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SERVICE MODE -1/2

Automatic adjustment is repealed when starting TEST MODE. TEST MODE is operated after making it an initial-setting value.
A VOL+/-key becomes invalid.
It becomes invalid except the PLAY/PAUSE key at the time of an OFF display.

1. Starting Preparation and Release Method

(1) Short-circuit the short land for TEST MODE starting of MAIN C.B with solder. (Fig.1 reference)
(2) Supply a power supply and complete the preparation which starts TEST MODE.
* In TEST MODE, detection of OPEN/CLOSE SW is disregarded and always hold a CLOSE state.
(3) After TEST MODE release and TEST MODE use should surely remove the solder of a short land.

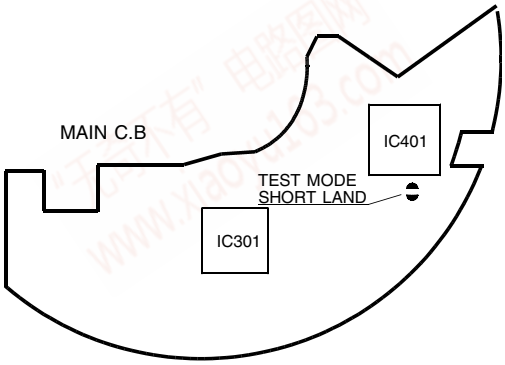
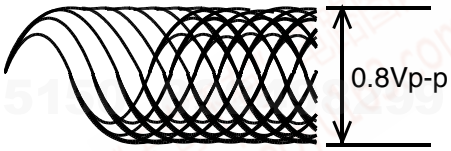


Fig.1 MAIN C.B

2. TEST MODE Starting

(1) TEST MODE starts by the PLAY/PAUSE key and shift to TOC lead operation.
When DISC is put in (CD-RW is unreproducible at the time of starting)
After TOC read completes, playback operation
(1 time fast playback) (Fig.2 reference)
* Other than TEST MODE 3 time fast playback.



0.2V/DIV, 500 μs/DIV
Fig.2 IC501 9pin RF signal (CD-DA)

* When the DISC is not inserted, (inserting the DISC, when reading is not possible)
Err indication (Fig.3 reference)

Fig.3 Err indication

3. LCD all the light indications

Pushes the PLAY/PAUSE key, before being time or Err indication of playback state, the PLAY MODE key it is pushed by the fact that the LCD all the light indications. (Fig.4 reference)

Fig.4 LCD all the light indications

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4. ON/OFF laser change

The ON/OFF of the laser is changed to the degree which pushes the PLAY MODE key in STOP state or during Err indicating.

Fig.5 LCD indication in stop

5. Thread Sending Operation of Pickup

By the fact that it continues to push the FWD/RVS SKIP key in STOP state or during Err indicating the pickup it operates to the inside and outside lap.

FWD SKIP key: Peripheral direction

RVS SKIP key: Inside perimeter direction

6. Focusing search mode

TOC read after the completing, length pushes the DSL key in STOP state.

Focus search operation is 1 time and observation of a S character waveform is possible for it with an oscilloscope (IC501 23pin).

The servo gain change of the CD-DA/R and the CD-RW is effective.

As for LCD indicatory value there is no stipulation at such as amplitude value.

Fig.6 LCD indication at time of focusing search mode

7. CD-DA/R and CD-RW servo gain change

At the time of TEST MODE starting, the servo gain of CD-DA/R.

TOC read after the completing, change is possible in the degree which pushes the DSL key in STOP state. (Fig.7 reference)

Fig.7-1 CD DA/R

Fig.7-2 CD-RW

8. Tracking / thread servo ON/OFF change

The ON/OFF it can point to tracking / thread servo to the degree which pushes the ENTER key in the PLAY.

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ELECTRICAL PARTS LIST -1/4

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UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
FLEX		0		8C-HC7-602-010	FLEX-PWB,ASSY CHC-7	a	b	c	d
FLEX		0	LCD0001	8C-HC7-605-010	LCD-P-06D-25x23.5SM&&&P G9023	a	b	c	d
MAIN		0	C 0102	87-A12-979-010	ELECT CAP 100 MFD/25V +-20% (	a	b	c	d
MAIN		0	C 0201	87-A12-994-010	ELECT CAP 330 MFD/6.3V +20% 1	a	b	c	d
MAIN		0	C 0202	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0203	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0204	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0205	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0206	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0207	87-A12-995-010	ELECT CAP 68 MFD/4V +-20% 105	a	b	c	d
MAIN		0	C 0208	87-A10-488-010	ELECT CAP 47 MFD/4V +-20% (SM	a	b	c	d
MAIN		0	C 0209	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0210	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0211	87-010-787-080	CHIP CAP 0.022 uF/25V +-10% (	a	b	c	d
MAIN		0	C 0212	87-010-872-080	CHIP CAP 470 pF/50V +-5% NPO	a	b	c	d
MAIN		0	C 0213	87-A12-158-040	ELECT CAP 100 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C 0214	87-A10-488-010	ELECT CAP 47 MFD/4V +-20% (SM	a	b	c	d
MAIN		0	C 0216	87-012-274-080	CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C 0217	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0218	87-A11-049-080	CHIP CAP 1 uF/6.3V +-10% (060	a	b	c	d

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		0	C 0219	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0220	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0221	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0222	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0301	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0303	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0304	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0305	87-012-286-080	CHIP CAP 0.01 uf/25V +-10% (0	a	b	c	d
MAIN		0	C 0306	87-012-176-080	CHIP CAP 15 pF/50V +-5% NPO (	a	b	c	d
MAIN		0	C 0307	87-012-178-080	CHIP CAP 18 pF/50V +-5% NPO (	a	b	c	d
MAIN		0	C 0308	87-012-278-080	CHIP CAP 0.0022 uf/50V +-10%	a	b	c	d
MAIN		0	C 0309	87-012-278-080	CHIP CAP 0.0022 uf/50V +-10%	a	b	c	d
MAIN		0	C 0310	87-012-195-080	CHIP CAP 100pF/50V	a	b	c	d
MAIN		0	C 0311	87-012-274-080	CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C 0312	87-012-274-080	CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C 0313	87-012-274-080	CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C 0401	87-015-908-010	ELECT CAP 220 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C 0402	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0403	87-015-908-010	ELECT CAP 220 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C 0404	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		0	C 0405	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0406	87-012-271-080	CHIP CAP 560 pF/50V +-10% (06	a	b	c	d
MAIN		0	C 0407	87-010-787-080	CHIP CAP 0.022 uF/25V +-10% (	a	b	c	d
MAIN		0	C 0408	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0409	87-A10-827-080	CHIP CAP 0.47 uF/10V +-10% (0	a	b	c	d
MAIN		0	C 0410	87-012-286-080	CHIP CAP 0.01 uf/25V +-10% (0	a	b	c	d
MAIN		0	C 0411	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0412	87-A12-158-040	ELECT CAP 100 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C 0413	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		X	C 0414	88-108-000-080	CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		0	C 0415	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0416	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0421	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0422	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0423	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0424	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	b	c	d
MAIN		0	C 0451	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	.	c	.
MAIN		0	C 0452	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	.	c	.
MAIN		0	C 0501	87-A12-158-040	ELECT CAP 100 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C 0502	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	.	c	.
MAIN		0	C 0503	87-010-787-080	CHIP CAP 0.022 uF/25V +-10% (	a	b	c	d
MAIN		0	C 0504	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0505	87-012-271-080	CHIP CAP 560 pF/50V +-10% (06	a	b	c	d
MAIN		0	C 0506	87-012-193-080	CHIP CAP 82 pF/50V +-5% NPO (	a	b	c	d
MAIN		0	C 0507	87-012-270-080	CHIP CAP 470 pF/50V +-5% NPO	a	b	c	d
MAIN		0	C 0508	87-A10-488-010	ELECT CAP 47 MFD/4V +-20% (SM	a	b	c	d
MAIN		0	C 0509	87-012-279-080	CHIP CAP 0.0027 uf/50V +-10%	a	b	c	d
MAIN		0	C 0510	87-012-279-080	CHIP CAP 0.0027 uf/50V +-10%	a	b	c	d
MAIN		0	C 0511	87-010-787-080	CHIP CAP 0.022 uF/25V +-10% (	a	b	c	d
MAIN		0	C 0513	87-010-787-080	CHIP CAP 0.022 uF/25V +-10% (	a	b	c	d
MAIN		0	C 0514	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0515	87-A10-260-080	CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C 0516	87-012-172-080	CHIP CAP 10 pF/50V +-0.5pF (0	a	b	c	d
MAIN		0	C 0517	87-012-184-080	CHIP CAP 33 pF/50V +-5% NPO (	a	b	c	d
MAIN		0	C 0518	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	.	c	.
MAIN		0	C 0519	87-010-831-080	CHIP CAP 0.1 uF/16V +80-20% (	a	.	c	.
MAIN		0	C 0520	87-A10-488-010	ELECT CAP 47 MFD/4V +-20% (SM	a	b	c	d
MAIN		0	C 0521	87-012-274-080	CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C 0522	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C 0523	87-A10-047-080	CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d

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MAIN		0	C	0524	87-010-831-080 CHIP CAP 0.1 uF/16V +80-20% (	a	.	c	.
MAIN		0	C	0701	87-015-908-010 ELECT CAP 220 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C	0702	87-012-286-080 CHIP CAP 0.01 uf/25V +-10% (0	a	b	c	d
MAIN		0	C	0703	87-012-336-080 CHIP CAP 330pF/50	a	b	c	d
MAIN		0	C	0704	87-012-336-080 CHIP CAP 330pF/50	a	b	c	d
MAIN		0	C	0705	88-108-823-080 CHIP RESISTOR 82 Kohm +-5% 1/	a	b	c	d
MAIN		0	C	0706	88-108-823-080 CHIP RESISTOR 82 Kohm +-5% 1/	a	b	c	d
MAIN		0	C	0707	87-A10-047-080 CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C	0708	87-A10-047-080 CHIP CAP 1 uf/10V +80-20% (06	a	b	c	d
MAIN		0	C	0709	87-A10-260-080 CHIP CAP 0.1 uf/16V +-10% (06	a	b	c	d
MAIN		0	C	0710	87-A10-488-010 ELECT CAP 47 MFD/4V +-20% (SM	a	b	c	d
MAIN		0	C	0717	87-015-908-010 ELECT CAP 220 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C	0718	87-015-908-010 ELECT CAP 220 MFD/4V +-20% (S	a	b	c	d
MAIN		0	C	0719	87-012-274-080 CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C	0720	87-012-274-080 CHIP CAP 0.001 uF/50V +-10% (	a	b	c	d
MAIN		0	C	0721	87-012-279-080 CHIP CAP 0.0027 uf/50V +-10%	a	b	c	d
MAIN		0	C	0722	87-012-279-080 CHIP CAP 0.0027 uf/50V +-10%	a	b	c	d
MAIN		0	C	0796	87-012-172-080 CHIP CAP 10 pF/50V +-0.5pF (0	a	b	c	d
MAIN		0	C	0797	87-012-172-080 CHIP CAP 10 pF/50V +-0.5pF (0	a	b	c	d
MAIN		0	C	0798	87-012-336-080 CHIP CAP 330pF/50	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		0	C	0799	87-012-336-080 CHIP CAP 330pF/50	a	b	c	d
MAIN		0	CN	0301	87-A60-756-080 C-CONNECTOR JST PITCH:0.5mm V	a	b	c	d
MAIN		0	CN	0501	87-A60-424-010 FFC CONN.SKT.16 PINS P:1mm VE	a	b	c	d
MAIN		0	CN	0601	87-009-411-010 HEADER JST 6 PINS	a	b	c	d
MAIN		S	D	0101	87-A41-128-040 DIODE MC2850	a	b	c	d
MAIN		S	D	0102	87-A40-554-040 CHIP DIODE RB491D (ROHM)	a	b	c	d
MAIN		S	D	0201	87-A40-196-080 ZENER DIODE UDZ6.2B 1/5W	a	b	c	d
MAIN		S	D	0406	87-A41-127-040 DIODE MC2848	a	b	c	d
MAIN		0	FB	0711	88-108-102-080 CHIP RESISTOR 1 Kohm +-5% 1/1	a	b	c	d
MAIN		X	FB	0712	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	FB	0713	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	FB	0714	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		S	IC	0201	87-A22-162-030 ICMOTORDRIVER-02CH BH6570KV	a	b	c	d
MAIN		S	IC	0301	8C-HC7-611-030 ICMCU-&&K-LCD MN101C439-AR	a	b	c	d
MAIN		S	IC	0302	87-A22-281-040 ICRESET PST3422UL	a	b	c	d
MAIN		S	IC	0401	87-A22-226-030 ICCDP-001DSP MN662786SBM	a	b	c	d
MAIN		S	IC	0451	87-A21-939-010 ICRAMD-04X004M GLT4160M04(G-L	a	b	c	d
MAIN		S	IC	0501	87-A21-873-040 ICCDP-001CASP AN8399SA-E1	a	b	c	d
MAIN		S	IC	0701	87-A22-163-040 ICAMP-HEAD-ST-0.008W NJM2772V	a	b	c	d
MAIN		0	J	0101	87-A61-340-010 POWER DC JACK TC18-099-01	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		0	J	0702	87-A61-339-010 HEADPHONE JACK 3.5mm 4 PIN (G	a	b	c	d
MAIN		0	L	0201	87-A50-759-080 CHIP INDUCTOR 330 uH LB2518T3	a	b	c	d
MAIN		0	L	0202	87-A50-769-010 CHOKE COIL 100uH +-10% (TOKIN	a	b	c	d
MAIN		0	L	0203	87-A50-759-080 CHIP INDUCTOR 330 uH LB2518T3	a	b	c	d
MAIN		0	L	0204	87-A50-758-080 CHIP INDUCTOR 100 uH LB2518T1	a	b	c	d
MAIN		0	L	0401	87-A50-758-080 CHIP INDUCTOR 100 uH LB2518T1	a	b	c	d
MAIN		0	L	0501	87-A50-759-080 CHIP INDUCTOR 330 uH LB2518T3	a	b	c	d
MAIN		0	L	0502	87-A50-759-080 CHIP INDUCTOR 330 uH LB2518T3	a	b	c	d
MAIN		S	Q	0101	87-A30-681-040 TRLPNPGEN-TAP&&&-&&& 2SC4154	a	b	c	d
MAIN		S	Q	0102	87-A30-385-040 CHIP TRANSISTOR DTA114YUA	a	b	c	d
MAIN		S	Q	0104	87-A30-679-040 TRLPNPPOW-TAP&SC-062 2SC5810	a	b	c	d
MAIN		S	Q	0201	87-A30-678-040 TRLPNPPOW-TAP&SC-062 2SA2070	a	b	c	d
MAIN		S	Q	0204	87-A30-681-040 TRLPNPGEN-TAP&&&-&&& 2SC4154	a	b	c	d
MAIN		S	Q	0211	87-A30-681-040 TRLPNPGEN-TAP&&&-&&& 2SC4154	a	b	c	d
MAIN		S	Q	0501	87-A30-405-040 TR NPNSST-RAD&SC-072 DTC114TUA	a	b	c	d
MAIN		S	Q	0504	87-A30-385-040 CHIP TRANSISTOR DTA114YUA	a	b	c	d
MAIN		S	Q	0510	87-A30-695-040 CHIP TRANSISTOR 2SB1689	a	b	c	d
MAIN		S	Q	0701	87-A30-386-040 CHIP TRANSISTOR DTA114TUA	a	b	c	d
MAIN		X	R	0101	88-108-182-080 CHIP RESISTOR 1.8 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0102	88-108-473-080 CHIP RESISTOR 47 Kohm +-5% 1/	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		X	R	0103	88-128-689-080 CHIP RESISTOR 6.8 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0105	88-138-399-080 CHIP RESISTOR 3.9 ohm +-5% 1/	a	b	c	d
MAIN		0	R	0106	88-108-561-080 CHIP RESISTOR 560 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0202	88-108-100-080 CHIP RESISTOR 10 ohm +-5% 1/1	a	b	c	d
MAIN		X	R	0203	88-108-220-080 CHIP RESISTOR 22 ohm +-5% 1/1	a	b	c	d
MAIN		0	R	0210	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0211	88-108-102-080 CHIP RESISTOR 1 Kohm +-5% 1/1	a	b	c	d
MAIN		0	R	0217	88-108-102-080 CHIP RESISTOR 1 Kohm +-5% 1/1	a	b	c	d
MAIN		X	R	0218	88-108-470-080 CHIP RESISTOR 47 ohm +-5% 1/1	a	b	c	d
MAIN		X	R	0221	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0222	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0223	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0224	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0225	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0226	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0227	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0301	88-108-274-080 CHIP RESISTOR 270 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0302	88-108-473-080 CHIP RESISTOR 47 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0303	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0304	88-108-223-080 CHIP RESISTOR 22 Kohm +-5% 1/	a	b	c	d

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ELECTRICAL PARTS LIST -3/4

! =⚠SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		X	R	0306	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0307	88-108-154-080 CHIP RESISTOR 150 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0309	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0310	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0311	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0312	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0313	88-108-101-080 CHIP RESISTOR 100 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0314	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0315	88-108-154-080 CHIP RESISTOR 150 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0316	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		X	R	0317	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0320	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0321	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0322	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0323	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0324	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0325	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0326	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0327	88-108-124-080 CHIP RESISTOR 120 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0330	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		X	R	0338	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0339	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0340	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0341	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0382	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0401	88-108-563-080 CHIP RESISTOR 56 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0402	88-108-683-080 CHIP RESISTOR 68 Kohm +-5% 1/	a	b	c	d
MAIN		X	R	0403	88-108-222-080 CHIP RESISTOR 2.2 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0404	88-108-151-080 CHIP RESISTOR 150 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0405	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0406	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0409	88-108-100-080 CHIP RESISTOR 10 ohm +-5% 1/1	a	b	c	d
MAIN		0	R	0410	88-108-101-080 CHIP RESISTOR 100 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0413	88-108-470-080 CHIP RESISTOR 47 ohm +-5% 1/1	a	b	c	d
MAIN		X	R	0415	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0416	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0501	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0502	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0503	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		X	R	0504	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		0	R	0505	88-108-822-080 CHIP RESISTOR 8.2 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0506	88-108-822-080 CHIP RESISTOR 8.2 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0507	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0508	88-108-223-080 CHIP RESISTOR 22 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0509	88-108-333-080 CHIP RESISTOR 33 Kohm +-5% 1/	a	b	c	d
MAIN		X	R	0510	88-108-124-080 CHIP RESISTOR 120 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0511	88-108-223-080 CHIP RESISTOR 22 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0512	88-108-822-080 CHIP RESISTOR 8.2 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0513	88-108-222-080 CHIP RESISTOR 2.2 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0514	88-108-182-080 CHIP RESISTOR 1.8 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0515	88-108-100-080 CHIP RESISTOR 10 ohm +-5% 1/1	a	b	c	d
MAIN		0	R	0519	88-108-101-080 CHIP RESISTOR 100 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0523	88-108-000-080 CHIP RESISTOR 0 ohm +-5% 1/16	a	b	c	d
MAIN		0	R	0701	88-108-689-080 CHIP RESISTOR 6.8 ohm +-5% 1/	a	b	c	d
MAIN		0	R	0702	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		X	R	0703	88-108-472-080 CHIP RESISTOR 4.7 Kohm +-5% 1	a	b	c	d
MAIN		X	R	0704	88-108-472-080 CHIP RESISTOR 4.7 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0707	88-108-102-080 CHIP RESISTOR 1 Kohm +-5% 1/1	a	b	c	d
MAIN		X	R	0708	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
MAIN		0	R	0709	88-108-102-080 CHIP RESISTOR 1 Kohm +-5% 1/1	a	b	c	d
MAIN		X	R	0710	88-108-104-080 CHIP RESISTOR 100 Kohm +-5% 1	a	b	c	d
MAIN		0	R	0711	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		0	R	0712	88-108-103-080 CHIP RESISTOR 10 Kohm +-5% 1/	a	b	c	d
MAIN		X	R	0713	88-108-109-080 CHIP RESISTOR 1 ohm +-5% 1/16	a	b	c	d
MAIN		X	R	0714	88-108-109-080 CHIP RESISTOR 1 ohm +-5% 1/16	a	b	c	d
MAIN		0	R	0719	88-108-561-080 CHIP RESISTOR 560 ohm +-5% 1/	a	b	c	d
MAIN		0	R	0720	88-108-561-080 CHIP RESISTOR 560 ohm +-5% 1/	a	b	c	d
MAIN		X	R	0722	88-108-181-080 CHIP RESISTOR 180 ohm +-5% 1/	a	b	c	d
MAIN		0	S	0301	87-A92-360-080 PUSH SW 1P1T LEVER MPU11190ML	a	b	c	d
MAIN		0	S	0302	87-A90-703-080 CHIP SLIDE SWITCH 1P3T SSSS81	a	b	c	d
MAIN		0	S	0311	87-A91-813-010 TACT SW SKHLLDA010	a	b	c	d
MAIN		0	S	0312	87-A91-813-010 TACT SW SKHLLDA010	a	b	c	d
MAIN		0	X	0301	87-030-194-010 CRYSTAL 32.768 KHz +-5ppm KF-	a	b	c	d
MAIN		0	X	0302	87-A70-373-010 CERAMIC RESONATOR 8.457 MHzCS	a	b	c	d
MAIN		0	X	0401	87-A70-375-080 CHIP CERAMIC RESONATOR 16.93MHz	a	b	c	d

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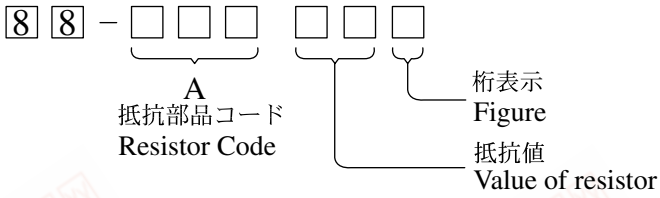
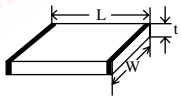
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

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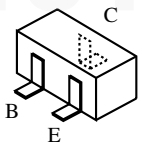
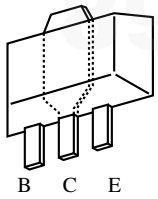
TRANSISTOR ILLUSTRATION -1/1



2SB1689
2SC4154
DTA114TUA
DTA114YUA
DTC114TUA



2SA2070
2SC5810

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TEL 13942296513
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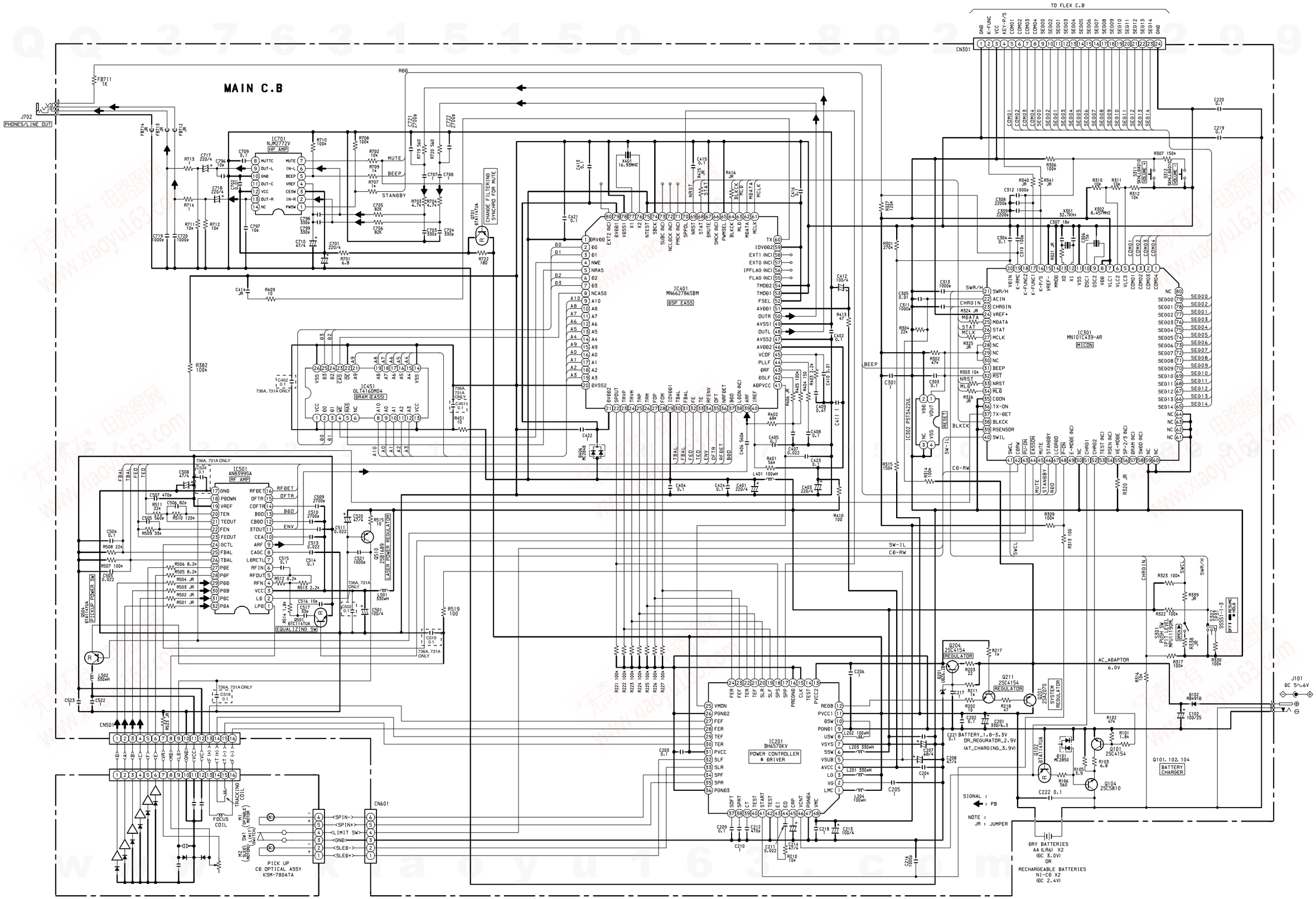
SCHEMATIC DIAGRAM - 1/2 (MAIN SECTION)



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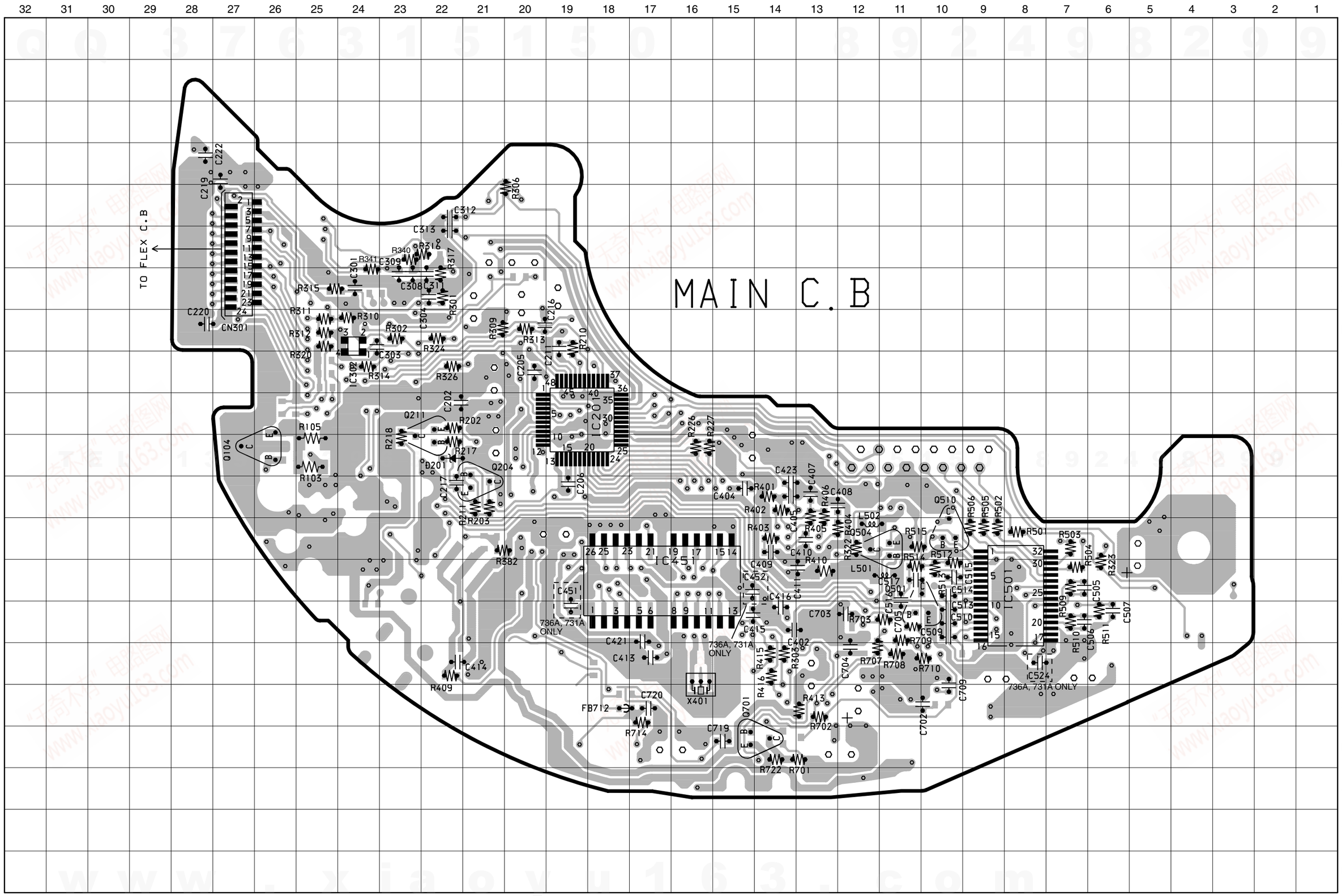
WIRING -1/3 (MAIN C.B -Top View-)



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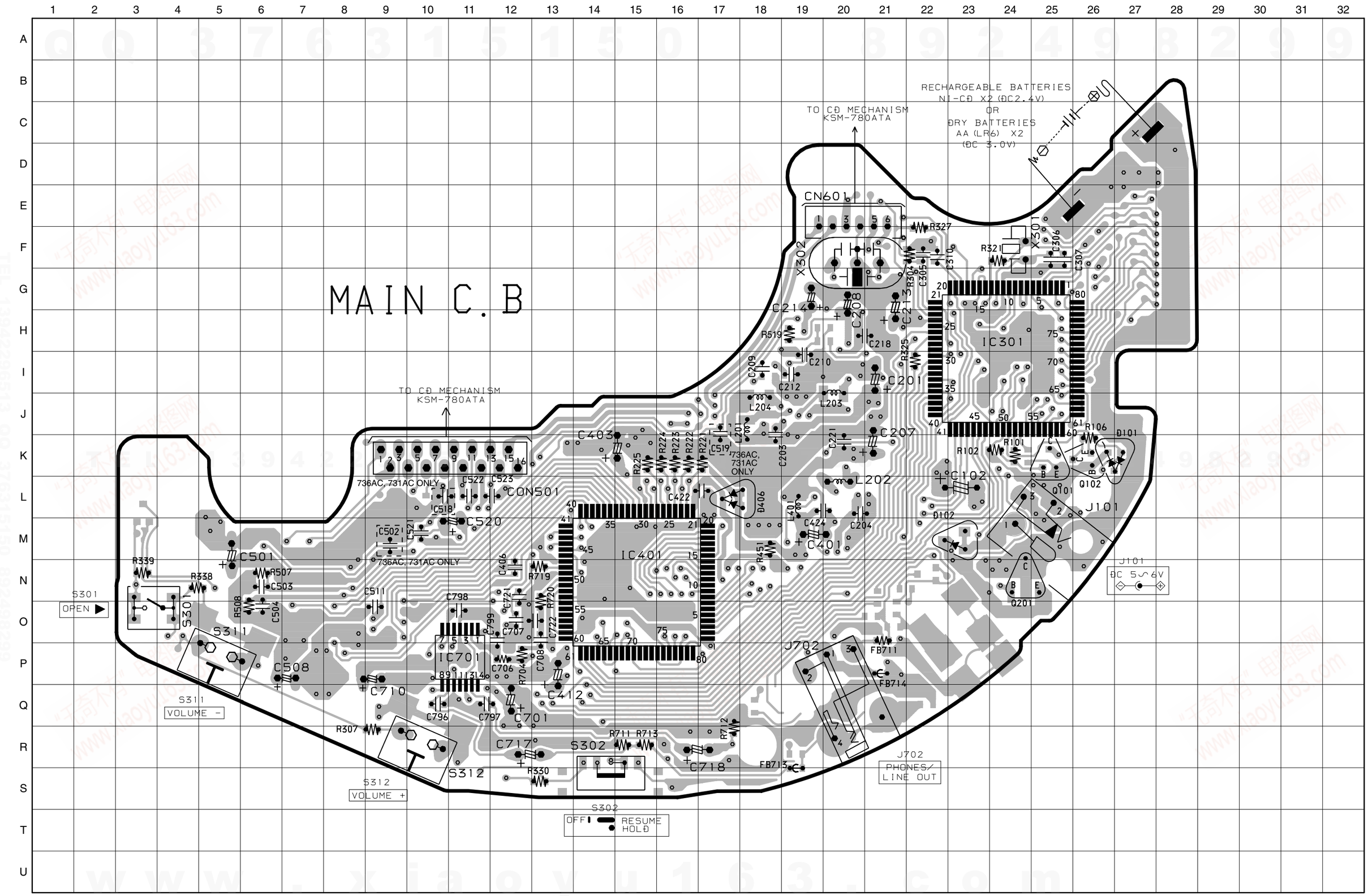
WIRING -2/3 (MAIN C.B -Bottom View-)



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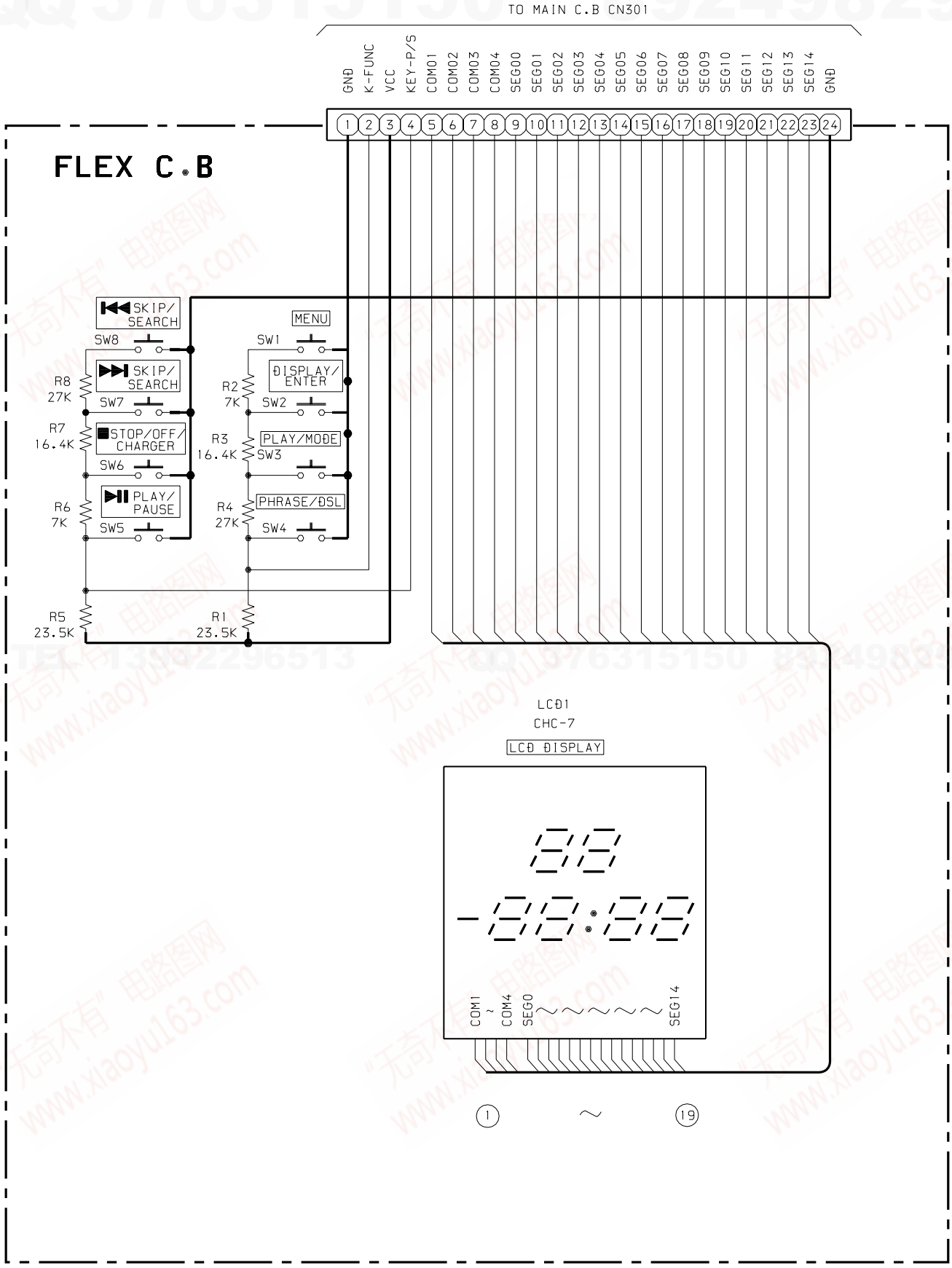
SCHEMATIC DIAGRAM -2/2 (FLEX SECTION)



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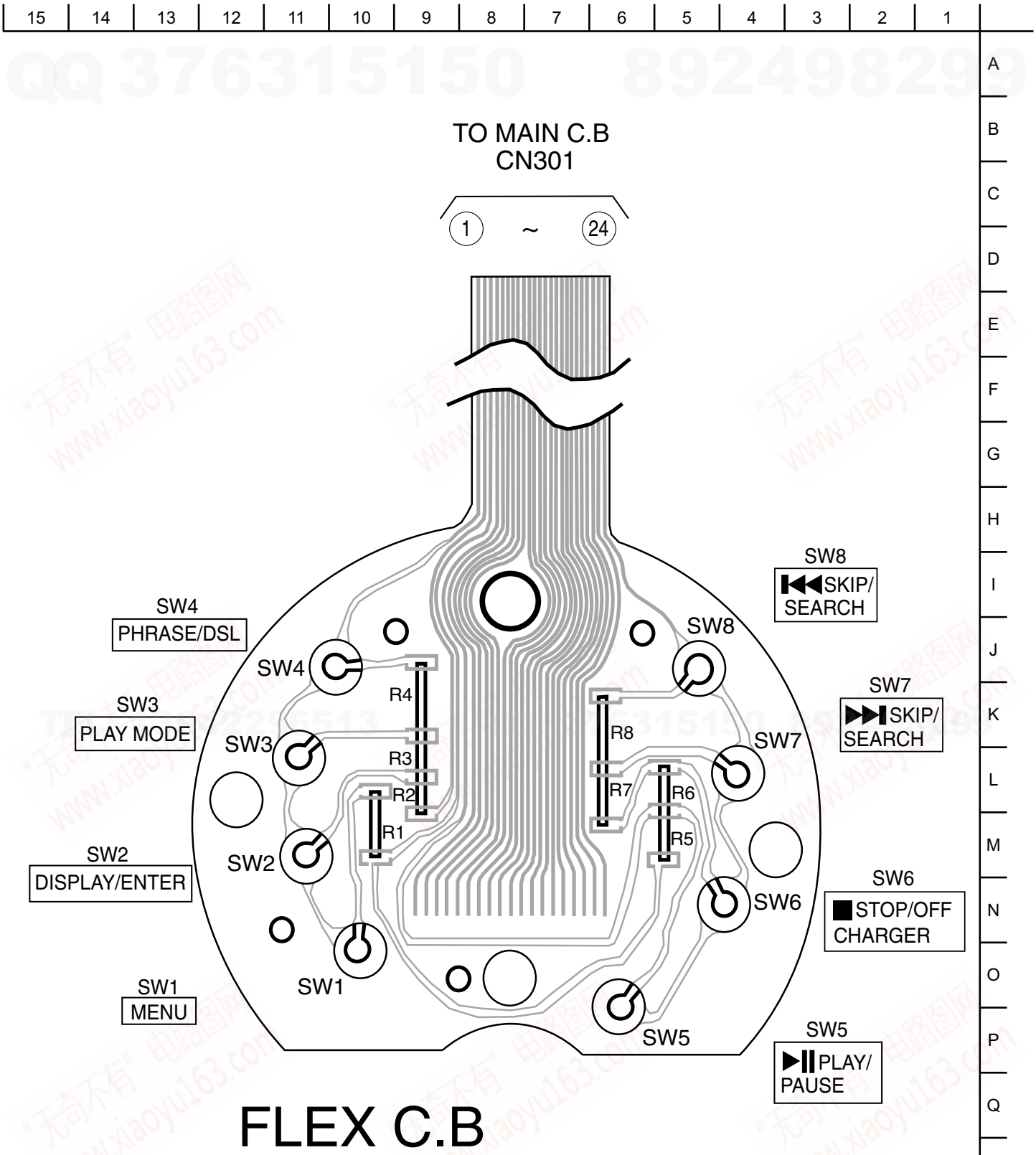

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THE MEASURED VALUE IS DC VOLTAGE
UNIT: V
TEST CONDITION:CD PLAY

IC301 (MN101C439-AR)

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
	1.10	1.10	1.10	1.10	0.43	1.39	2.60	2.59	1.25	1.26
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
	0	1.00	1.37	0	0	2.60	2.6	2.58	0	1.88
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
	2.50	0	0	2.60	2.56	1.90	2.57	0.00	0	0
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
	0	2.60	2.60	2.60	0	0	0	0	0	2.60
PIN'S NUMBER	41	42	43	44	45	46	47	48	49	50
	0	0	2.56	0	0	2.57	1.10	0	2.56	0
PIN'S NUMBER	51	52	53	54	55	56	57	58	59	60
	0	0	2.56	2.57	0	2.57	2.57	2.57	/	/
PIN'S NUMBER	61	62	63	64	65	66	67	68	69	70
	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	71	72	73	74	75	76	77	78	79	80
	/	/	/	/	/	/	/	/	/	/

IC401 (MN662786SB)

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
	2.49	1.26	1.26	2.36	2.26	1.26	1.28	2.44	0.10	0.10
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
	0.10	0.10	0.17	0.17	0.11	0.43	0.43	0.43	0.40	0
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
	1.87	0.48	0	0	0	0	0	0	0.44	0.43
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
	0.43	1.23	1.17	1.23	0	0	0	2.36	1.18	1.05
PIN'S NUMBER	41	42	43	44	45	46	47	48	49	50
	1.50	1.19	1.18	2.10	0	2.38	0	1.43	0	1.43
PIN'S NUMBER	51	52	53	54	55	56	57	58	59	60
	2.86	2.49	0	0	0.36	0	1.03	0	2.49	0
PIN'S NUMBER	61	62	63	64	65	66	67	68	69	70
	2.53	2.52	2.57	0	0	1.13	0	1.50	2.57	0
PIN'S NUMBER	71	72	73	74	75	76	77	78	79	80
	1.24	2.46	0	0	0	1.02	1.00	0	0	0

IC701 (NJM2772V)

PIN'S NUMBER	1	2	3	4	5	6	7
	2.53	1.23	3.00	2.00	0	1.40	0
PIN'S NUMBER	8	9	10	11	12	13	14
	0.88	1.10	0	1.06	3.00	1.08	0

IC451 (GM71VLS17403CTL)

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
	2.46	1.23	1.24	2.29	2.25	0	/	0.43	0.14	0.14
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
	0.40	0	2	0	0.17	0.17	0.17	0	0.39	/
PIN'S NUMBER	21	22	23	24	25	26				
	0.45	0	2.33	1.22	1.23	0				

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VOLTAGE CHART -2/2

IC302 (PST3422UL)

PIN'S NUMBER	1	2	3	4
	2.56	2.56	0	0

IC501(AN8399SA)

PIN'S NUMBER	1	2	3	4	5	6	7	8
	0.17	1.66	2.44	0	0.91	1.65	1.21	1.35
PIN'S NUMBER	9	10	11	12	13	14	15	16
	1.21	0.91	1.23	1.46	0	0	0	0
PIN'S NUMBER	17	18	19	20	21	22	23	24
	0	2.56	0.43	0.30	1.20	1.22	1.22	1.20
PIN'S NUMBER	25	26	27	28	29	30	31	32
	1.22	1.26	1.22	1.22	0	0	0	0.44

IC201 (BH6570KV)

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10
	3.00	5.97	3.00	2.95	3.16	2.48	2.50	2.51	0	2.55
PIN'S NUMBER	11	12	13	14	15	16	17	18	19	20
	3.00	0.37	0	2.47	0	0	0	0.54	0	0
PIN'S NUMBER	21	22	23	24	25	26	27	28	29	30
	0	0	0	0	1.49	0	0	0	0	0
PIN'S NUMBER	31	32	33	34	35	36	37	38	39	40
	3.04	0	0	0	0.62	0	2.02	0	0.40	2.48
PIN'S NUMBER	41	42	43	44	45	46	47	48		
	0	0	0.92	0.53	2.95	0	0	2.58		

TRANSISTOR	Q101(2SC4154)			Q102(DTA114YU)			Q104(2SC5810)		
	E	C	B	E	C	B	E	C	B
	0	0	0	0	1.70	0	0	0	0.20
TRANSISTOR	Q201(2SA2070)			Q204(2SC4154)			Q211(2SC4154)		
	E	C	B	E	C	B	E	C	B
	0	3.00	3.40	0	0	0	3	4.00	0

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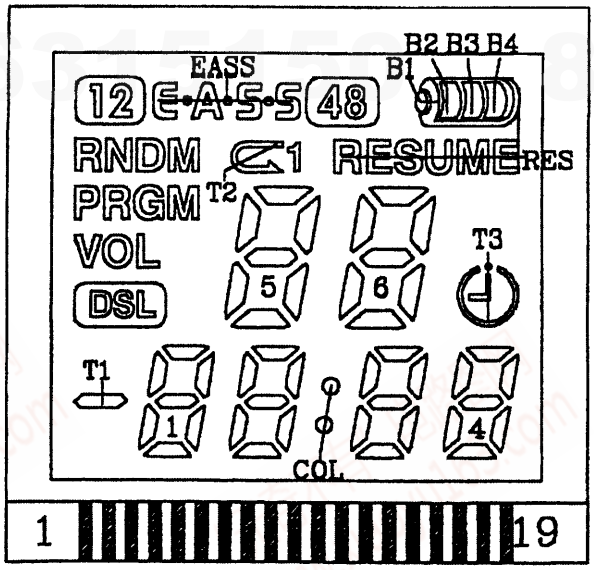
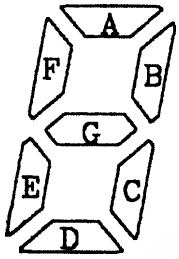
LCD DISPLAY -1/1





COM/PIN #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
COM-1	COM1				12	5C	5D	1D	1C	2D	2C	3D	3C	4D	4C	6D	6C	B4	B3
COM-2		COM2			RNDM	5G	5E	1E	1G	2E	2G	3E	3G	4E	4G	6E	6G	B1	B2
COM-3			COM3		PRGM	5B	5F	1F	1B	2F	2B	3F	3B	4F	4B	6F	6B	RES	48
COM-4				COM4	VOL	5A	DSL	T1	1A		2A	COL	3A	T3	4A	T2	6A	1	EASS

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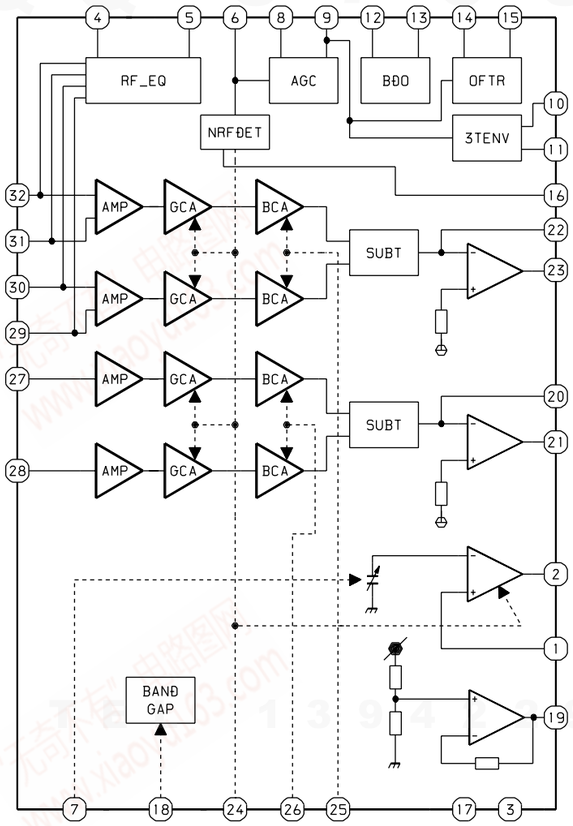
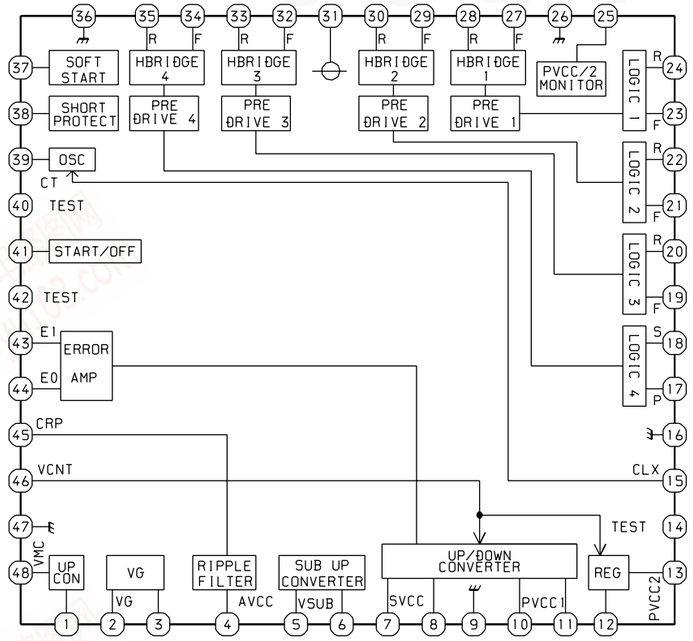
IC BLOCK DIAGRAM - 1/1

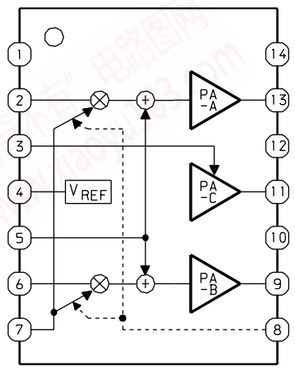
IC, AN8399SA



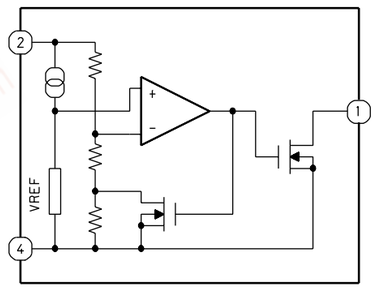
IC, BH6570KV



IC, NJM2772V



IC, PST3422UL



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IC DESCRIPTION -1/2 (MN662786SB) -1/2

Pin No.	Pin Name	I/O	Description
1	DRVDD	I	DRAM interface power (terminal No. 2 to 19).
2 ~ 3	D0 ~ D1	I/O	DRAM data input/output signal 0 ~ 1.
4	NWE	O	DRAM write enable signal.
5	NRAS	O	DRAM RAS control signal.
6 ~ 7	D2 ~ D3	I/O	DRAM data input/output signal 2 ~ 3.
8	NCAS0	O	DRAM CAS control signal 0.
9	A10	O	DRAM address signal 10.
10 ~ 14	A8 ~ A4	O	DRAM address signal 8 ~ 4.
15	A9	O	DRAM address signal 9.
16 ~ 19	A0 ~ A3	O	DRAM address signal 0 ~ 3.
20	DVSS2	I	Digital circuit GND.
21	DVDD2	I	Digital circuit power.
22	SPOUT	O	Spindle motor driver signal output.
23	TRVP	O	Traverse drive output (- polar output).
24	TRVM	O	Traverse drive output (+ polar output).
25	TRP	O	Tracking drive output (- polar output).
26	TRM	O	Tracking drive output (+ polar output).
27	FOP	O	Focus drive output (- polar output).
28	FOM	O	Focus drive output (+ polar output).
29	IOVDD1	I	I/O Power supply.
30	TBAL	O	Tracking balance adjustment output.
31	FBAL	O	Focus balance adjustment output.
32	FE	I	Focus error signal input (analogue input).
33	TE	I	Tracking error signal input (analogue input).
34	RFENV	I	RF envelope signal input (analogue input).
35	OFT	I	Off track signal input. “H” = Off track.
36	NRFDET	I	RF detection signal input. “L” = Detected.
37	BDO	I	Drop out signal input. “H” = Drop out.
38	LDON (NC)	O	Laser ON signal output. “H” = ON. (Not used)
39	ARF	I	RF signal input.
40	IREF	I	Reference current input terminal.
41	ADPVCC	I	AD reference voltage input (analogue input).
42	DSLF	O	DSL loop filter terminal.
43	DRF	O	Bias terminal for DSL.
44	PLLF	O	PLL loop filter terminal.
45	VCOF	O	Jitter free VCO loop filter terminal.
46	AVDD2	I	Analogue circuit power (for DSL, PLL, VCOF, AD, DA).
47	AVSS2	I	Analogue circuit GND (for DSL, PLL, VCOF, AD, DA).
48	OUTL	O	Lch audio output.

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IC DESCRIPTION -1/2 (MN662786SB) -2/2

Pin No.	Pin Name	I/O	Description
49	AVSS1	I	Analogue circuit GND.
50	OUTR	O	Rch audio output.
51	AVDD1	I	Analogue circuit power.
52	FSEL	I	Noise filter ON/OFF switch input. “L” = ON, “H” = OFF. (Connected to VDD)
53	TMOD1	I	Terminal mode switch input terminal 1. Normally set to “L”. (Connected to GND)
54	TMOD2	I	Terminal mode switch input terminal 2. Normally set to “L”. (Connected to GND)
55	FLAG (NC)	O	Flag signal output. (Not used)
56	IPFLAG (NC)	O	Interpolation flag signal output. “H” = Interpolation. (Not used)
57	EXT0 (NC)	I/O	Extension input/output port 0. (Not used)
58	EXT1(NC)	I/O	Extension input/output port 1. (Not used)
59	IOVDD2	I	IO Power supply.
60	TX	O	Digital audio interface output signal.
61	MCLK	I	Microcomputer command clock signal input. (Data is latched at loading edge)
62	MDATA	I	Microcomputer command data signal input.
63	MLD	I	Microcomputer command load signal input. “L” = Load.
64	BLKCK	O	Sub-code block clock signal fBLKCK = 75 Hz. (In normal PLAY mode)
65	PWMSEL	I/O	PWM output mode select input. (Connected to GND)
66	SMCK (NC)	O	4.236MHz / 8.4672MHz clock signal output. (Not used)
67	DMUTE	I/O	Muting input, “H” = MUTE. (Connected to GND)
68	STAT	O	Status signal output.
69	NRST	I	Reset input. “L” = Reset.
70	SPPOL	O	Spindle motor drive signal output. (Polar output)
71	PMCK (NC)	O	88.2 kHz clock signal output. (Not used)
72	NCLDCK (NC)	O	Sub-code frame clock signal output = 7.35 kHz (In normal PLAY mode) (Not used)
73	SUBC (NC)	O	Sub-code serial output. (Not used)
74	SBCK	O	Clock input for sub-code serial output. (Connected to GND)
75	NTEST	I	Test terminal, normally set to “H”. (Connected to VDD)
76	X2	O	Quartz oscillator circuit output terminal f = 16.93 MHz.
77	X1	I	Quartz oscillator circuit input terminal f = 16.93 MHz.
78	VD SS1	I	Digital circuit GND.
79	DVDD1	I	Digital circuit power.
80	EXT2 (NC)	I/O	Extension input / output port 2. (Not Used)

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IC DESCRIPTION -2/2 (MN101C439-AR) -1/2

Pin No.	Pin Name	I/O	Description
1	COM04	O	LCD common output.
2	COM03	O	LCD common output.
3	COM02	O	LCD common output.
4	COM01	O	LCD common output.
5	VLC3	–	LCD drive voltage setting terminal.
6	VLC2	–	LCD drive voltage setting terminal.
7	VLC1	–	LCD drive voltage setting terminal.
8	VDD	–	LCD power.
9	OSC2	O	Micon main clock oscillator output. (8.457MHz)
10	OSC1	O	Micon main clock oscillator output. (8.457MHz)
11	VSS	–	GND.
12	X1	I	Sub clock oscillator. (32.7 kHz)
13	XO	O	Sub clock oscillator. (32.7 kHz)
14	MMOD	I	Processor mode unused. (Connected to GND)
15	VREF-	–	Connected to GND.
16	K-P / S	I	“ PLAY ” and “ STOP ” key inputs.
17	K-FUNG1	I	“ FUNCTION ” key input.
18	K-FUNC2	I	“ FUNCTION ” key input.
19	K-RMC	I	Wired remote control input.
20	VDIN	I	Battery voltage monitoring input.
21	SWR / H	I	Resume / Hold switch input.
22	ACIN	I	AC adaptor detection.
23	CHRGIN	I	Charge voltage monitoring input.
24	VREF+	–	Connected to VDD.
25	MDATA	O	DSP MDATA output.
26	STAT	I	DSP STAT input.
27	MCLK	O	DSP MCLK output.
28	NC	–	Not connected.
29	NC	–	Not connected.
30	NC	–	Not connected.
31	BEEP	O	Buzzer output for headphone.
32	$\overline{\text{RST}}$	I	Micro computer reset input.
33	NRST	O	DSP reset output.
34	$\overline{\text{MLD}}$	O	DSP MLD output.
35	CD ON	O	Connected to GND.
36	TX-ON	O	Connected to GND.
37	TX-DET	I	Optout jack detection.
38	BLKCK	I	DSP BLKCK input.
39	RESENSOR	I	Wireless control sensor signal input. (Connected to GND)
40	SWIL	I	Limited switch input.
41	SWCL	I	Cover open / close detection switch input.

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IC DESCRIPTION -2/2 (MN101C439-AR) -2/2

Pin No.	Pin Name	I/O	Description
42	CDRW	O	CD-RW play gain level selection output. OFF at " L". Gain set at " H ". Normal at " OPEN ".
43	$\overline{\text{PU-ON}}$	O	H / A power down output.
44	$\overline{\text{EASSON}}$	O	EASS gain up selection output. Eass ON at = " L ".
45	MUTE	O	Audio mute output.
46	STANDBY	O	Headphone standby output. Standby at " L ". Power ON at " H ".
47	LCDRDO	O	Wired LCD remote control output.
48	$\overline{\text{P-ON}}$	O	Power IC power ON output. Power ON at " L ".
49	E-MODE (NC)	I	Continuously 2 time spindle speed mode. (Not used)
50	NC	–	Connected to GND.
51	CHRG1	O	Main charge output.
52	CHRG2	O	Sub charge output.
53	TEST (NC)	I	Enter test mode at " L ". (Not used)
54	RSEN (NC)	I	Wireless remote control sensor detection. (Not used)
55	VE-MODE	I	Variable re-proof timing detection for EASS 48. ON at " L ". (Connected to GND)
56	SP-2 / 3 (NC)	I	Not used.
57	DRAM (NC)	I	3 / 12 or 12 / 48 sec selection input. 3 / 12 sec at " L ". (Not used)
58	SWDO (NC)	I	Digital out detection ON at " L ". (Not used)
59	NC	–	Connected to GND.
60	NC	–	Connected to GND.
61	NC	–	Connected to GND.
62	NC	–	Connected to GND.
63	NC	–	Connected to GND.
64	NC	–	Connected to GND.
65	SEG14	O	LCD Segment output.
66	SEG13	O	LCD Segment output.
67	SEG12	O	LCD Segment output.
68	SEG11	O	LCD Segment output.
69	SEG10	O	LCD Segment output.
70	SEG09	O	LCD Segment output.
71	SEG08	O	LCD Segment output.
72	SEG07	O	LCD Segment output.
73	SEG06	O	LCD Segment output.
74	SEG05	O	LCD Segment output.
75	SEG04	O	LCD Segment output.
76	SEG03	O	LCD Segment output.
77	SEG02	O	LCD Segment output.
78	SEG01	O	LCD Segment output.
79	SEG00	O	LCD Segment output.
80	NC	–	Not connected.

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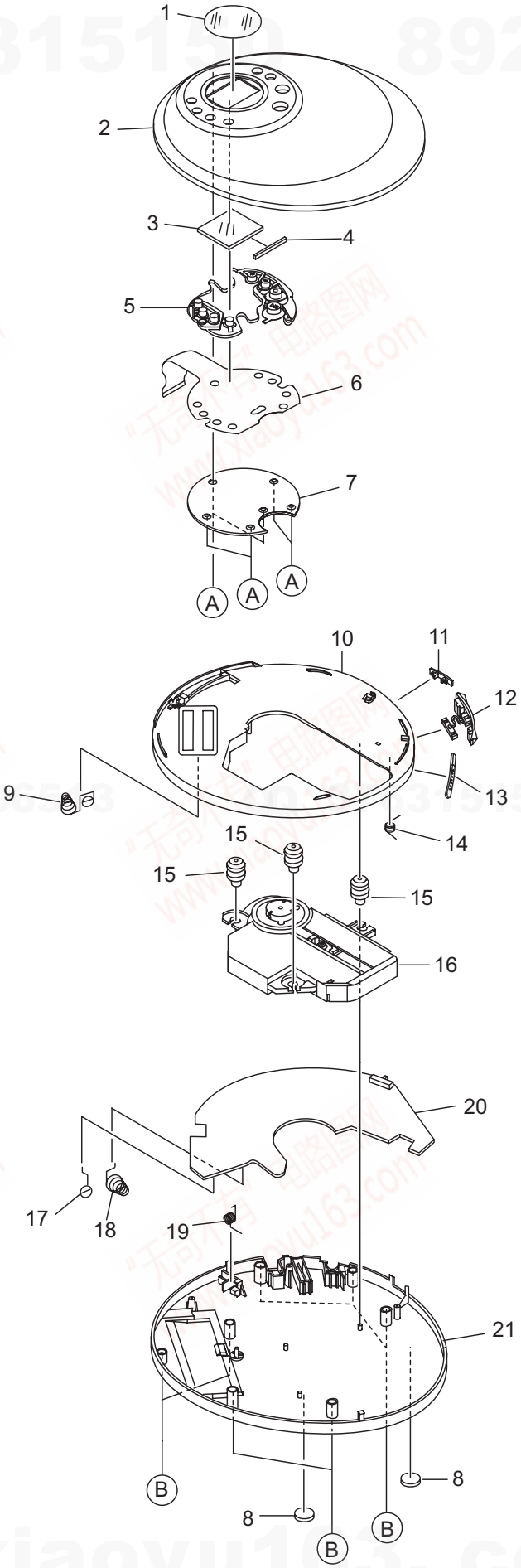
MECHANICAL EXPLODED VIEW -1/1



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MECHANICAL PARTS LIST -1/1

! = ⚠ SAFETY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
			0	MC1001	8C-HC7-005-010 CD WINDOW PLATE CHC7-05-01 0.	a	b	c	d
			0	MC1002	8C-HC7-015-010 CD LID(736) CHC7-01-04 (PC) T	a	.	.	.
			0	MC1002	8C-HC7-050-010 CD LID(730C) CHC7-01-15 JNL00	.	b	.	.
			0	MC1002	8C-HC7-016-010 CD LID(731) CHC7-01-05 (PC)T-	.	.	c	.
			0	MC1002	8C-HC7-124-010 CD LID(731C) CHC7-01-16 JNL00	.	.	.	d
			0	MC1003	8C-HC7-605-010 LCD-P-06D-25x23.5SM&&&P G9023	a	b	c	d
			0	MC1004	8C-HC7-210-010 ZEBRA CONNECTOR 24.8x2.3x1.5m	a	b	c	d
			0	MC1005	8C-HC7-007-010 PLAY KNOB CHC7-06 MOLD L.GREY	a	b	c	d
			0	MC1006	8C-HC7-602-010 MEMBRANCE SW MC-A1-A28 R 4503	a	b	c	d
			0	MC1007	8C-HC7-203-010 LCD PLATE CHC7-16 SECC-E20/20	a	b	c	d
			0	MC1008	88-HC6-021-010 FOOT ZHC5-14 DIA:10 PORON (HH	a	b	c	d
			X	MC1009	8C-HC7-216-010 BATT SPRING (+/-) CHC7-15 SWI	a	b	c	d
			0	MC1010	8C-HC7-002-010 CENTER CABINET CHC7-02 MOLD D	a	b	c	d
			0	MC1011	8C-HC7-010-010 HOLD SL KNOB CHC7-09 MOLD D.G	a	b	c	d
			0	MC1012	8C-HC7-008-010 VOLUME KNOB CHC7-07 MOLD D.GR	a	b	c	d
			0	MC1013	8C-HC7-009-010 OPEN SL KNOB CHC7-08 MOLD L.G	a	b	c	d
			0	MC1014	8C-HC7-202-010 SL OPEN SPRING CHC7-12 SUS304	a	b	c	d
			0	MC1015	8C-HC7-215-010 CD MECHA CUSHION BHC7-23 BLAC	a	b	c	d
			0	MC1016	M8-CZK-190-070 CD&-PTB-01-SONY-N CD MECHANIS	a	b	c	d
			0	MC1017	8C-HC7-204-010 BATT SPRING (+) CHC7-13 SWICK	a	b	c	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
			0	MC1018	8C-HC7-205-010 BATT SPRING (-) CHC7-14 SWICK	a	b	c	d
			0	MC1019	8C-HC7-218-010 LID SPRING CHC7-36 SUS304 D=0	a	b	c	d
			X	MC1020	8C-HC7-603-110 PCB CHC7-02-01 155x120x1.0mm/	a	b	c	d
			0	MC1021	8C-HC7-006-010 CABI,ASS'Y BOTTOM	a	b	c	d
			X	MC1021a	8C-HC7-003-010 BOTTOM CABINET CHC7-03 MOLD D	a	b	c	d
			X	MC1021b	8C-HC7-004-010 BATTERY LID CHC7-04 MOLD D.GR	a	b	c	d
			0	MC1A	87-067-732-010 SCREW 1.4x3mm PB TTS H=0.5 DI	a	b	c	d
			0	MC1B	87-067-768-010 SCREW 1.7x7mm PB T.T.S. BLACK	a	b	c	d

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COLOR NAME TABLE -1/1

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink
LA	Aqua Blue	GL	Light Green	HT	Transparent Gray
HM	Metallic Gray	NH	Champagne Gold	M	Wood Pattern

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OTHER PARTS LIST -1/1

! = ⚠SAFETY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

UNIT-NAME	!	C	REF-NO	PARTS-NO	PARTS-NAME	SUFFIX&MODEL			
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
		X		84-711-909-010	DATE CODE LABEL 118-94-04 (ST	a	.	c	d
		X		87-B50-099-010	WARR-CARD, C(F)POR-O W-82 S:1	a	.	c	d
		X		87-B50-098-010	WARR-CARD,C(E)POR-O W-81 S:10	a	.	c	d
		X		8C-HC7-557-010	BLISTER CARD (736ACB2SC) CHC7	a	.	.	.
		X		8C-HC7-864-010	CORRUGATE CARD (4) CHC7-99-04	a	.	.	.
		X		8C-HC7-555-010	BLISTER CARD(731ACB2S) CHC7-9	.	.	c	.
		X		8C-HC7-861-010	CORRUGATE CARD (2) CHC7-99-02	.	.	c	.
		X		8C-HC7-513-010	CORRUGATE CARD(8) CHC7-99-08	.	.	.	d
		X		87-B50-078-010	FACILITY LIST (S)-0007 S:295x	a	b	c	d
		X		8Z-HC4-209-010	(F809-8RU594-12A) SENSOR AM T	a	.	c	d
		X		87-B40-282-010	F809-00000A-110) BAR CODE LBL	a	.	c	d
		X		8C-HC7-856-010	BOTTOM BLISTER (733YUCBSC) CH	a	.	.	.
		X		87-B40-281-010	(F809-00000A-100) BAR CODE LB	.	b	.	.
		X		8C-HC7-944-010	CAR SHEET(LH) CHC7-95-10 S:21	.	b	.	.
		X		8C-HC7-553-010	G/B(730CYL1S) CHC7-92-05 E-PL	.	b	.	.
		X		S0-900-900-000	PE POLYBAG 0.045x9"x9", w/HOL	.	b	.	.
		X		8C-HC7-852-010	BOTTOM BLISTER (732YUCBSC) CH	.	.	c	.
		X		8C-HC7-559-010	BLISTER CARD(731CACB2SC) CHC7	.	.	.	d
		X		8C-HC7-897-010	BOTTOM BLISTER(730C) CHC7-98	.	.	.	d
		X		8C-HC7-941-010	CAR SHEET(U) CHC7-95-07 S:210	.	.	.	d
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
		X		8C-HC7-973-010	POP LABEL (731AC) CHC7-94-12	a	.	c	d
		X		8C-HC7-017-010	SPEC LABEL (736) CHC7-94-04 S	a	.	.	.
		X		8C-HC7-855-010	TOP BLISTER (733YUCBSC) CHC7-	a	.	.	.
		X		8C-HC7-981-010	POP LABEL(730YL) CHC7-94-15 S	.	b	.	.
		X		8C-HC7-089-010	SPEC LABEL(L,730C) CHC7-94-18	.	b	.	.
		X		8C-HC7-018-010	SPEC LABEL(731) CHC7-94-05 S:	.	.	c	.
		X		8C-HC7-851-010	TOP BLISTER(732YUCBSC) CHC7-9	.	.	c	.
		X		8C-HC7-127-010	SPEC LABEL(C731C) CHC7-94-10	.	.	.	d
		X		8C-HC7-896-010	TOP BLISTER(730C) CHC7-97 0.6	.	.	.	d
		X		8C-HC7-127-010	SPEC LABEL(C731C) CHC7-94-10	.	.	.	d
		X		8C-HC7-209-010	SH, WINDOW S CHC7-19 ADHESIVE	a	b	c	d
		X		SC-HC7-350-000	SHEET ADHESIVE CHC7-35 T=0.12	a	b	c	d
		X		SC-HC7-350-000	SHEET ADHESIVE CHC7-35 T=0.12	a	.	.	.
		X		8C-HC7-206-010	CABI CENTER SHEET PLATE CHC7-	a	b	c	d
		X		8C-HC7-208-010	SH, WINDOW L CHC7-18 ADHESIVE	a	b	c	d
		X		8C-HC7-217-010	SH,BOTTOM CHC7-28 PET WITH DO	a	b	c	d
		X		8C-HC7-211-010	SHEET FLK PET SHEET CHC7-21 O	a	b	c	d
		X		8Z-HC4-209-010	(F809-8RU594-12A) SENSOR AM T	a	.	c	d
		X		8C-HC7-017-010	SPEC LABEL (736) CHC7-94-04 S	a	.	.	.
						XP-V736 ACB2SC	XP-V730C YL1SC	XP-V731 ACB2SC	XP-V731C ACB2SC
		X		8C-HC7-089-010	SPEC LABEL(L,730C) CHC7-94-18	.	b	.	.
		X		SC-HC7-350-000	SHEET ADHESIVE CHC7-35 T=0.12	.	.	c	.
		X		8C-HC7-018-010	SPEC LABEL(731) CHC7-94-05 S:	.	.	c	.
		X		8C-HC7-216-010	SH,BOTTOM CHC7-29 CU CU WITH	a	b	c	d

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